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AGR, \phi-features and V-movement: Identifying pro*

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0. Introduction.

The possibility of a language having null thematic subjects has been, since Rizzi (1982), tied to the "strength" of its verbal inflection. In this paper, I want to argue that the identificational properties of "strong agreement" are a function of the φ-content and the movement properties of V. More specifically, I will argue that having the required φ-features (that is, Person) is a necessary but not a sufficient condition, and that the movement of V provides the adequate structural configuration for the φ-content of V to be fully operational (i.e., "identificational"); V-raising is, then, a necessary but still not a sufficient condition. Thus, it is the conjunction of both conditions that allows identification of an empty (subject) pronoun.

The second claim of this paper is that the (identificational) set of ϕ -features (henceforth, ϕ 's) needs not be part of the agreement inflection of the V. More concretely, I will propose that lexicalized bunches of ϕ -features can be generated directly under Agr_s^o . This will allow a language without V-movement to be *pro-drop* (in the technical sense); it will also allow a language with V-movement but without the adequate ϕ -content to identify a null thematic subject.

An example of the former (no movement of V and a lexicalized set of ϕ 's under Agr_So) is, I will argue, Russian; the latter case (a lexicalized set of ϕ -features under Agr_So, and movement of a V without the optimal ϕ -content) is represented by languages traditionally analyzed as having syntactic subject-clitics (scl), (e.g., the Northern Italian dialects and some dialects of French).¹

I will be assuming a Checking Theory of Case, as laid out in Chomsky (1992). More concretely, I will assume that lexical items are base generated already inflected, and that they have to validate the features corresponding to their inflection by checking them in the appropriate (functional) domain. This domain is called the checking domain in Chomsky (1992), and it is a subset of the minimal domain of a head, namely the one that excludes the complement of H; informally stated, it includes the Specifier of the maximal projection, material adjoined to the maximal projection and any head adjoined to H.²

^{*} I want to thank H.Borer and B.Rohrbacher for comments and discussion on the material in this and previous versions. Thanks also to N.Kondrashova and S.Avrutin for discussing the Russian data with me and being great informants; my other informants have been I. Galperin (Russian) and G. Prósper and E.Jiménez (PR-Sp.), to whom I am also grateful. Usual disclaimers apply.

¹Cf. Roberge (1986) and Brandi&Cordin (1989).

²Cf. Chomsky (1992) pp.15-17. Notice that H can be a trivial one-member chain, or a non-trivial chain (α_1, α_i) , the result of (head-)movement.

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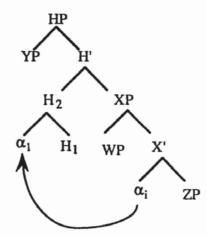
- (1) Max (CH) is the least full-category maximal projection dominating CH
- (2) The domain of CH=
 the set of nodes contained in Max (CH) that are distinct from and do not contain any α;
- (3) The complement domain of CH= the subset of the domain reflexively dominated by the complement of α_1
- (4) The residue of CH=
 the domain of CH minus the complement domain of CH
- (5) MIN (S) [Minimal (Set)]
 for any set S of categories,
 MIN (S) = the smallest subset K of S,

such that for any $\Gamma \in S$, some $\beta \in K$ reflexively dominates Γ .

- (i) the minimal domain of CH = MIN (the domain of CH)
- (ii) the minimal complement domain of CH = MIN (the complement domain of CH)
- (iii) the checking domain of CH = MIN (the residue of CH)

In a tree like the following:

(6)



the domain of CH (α_1, α_i) is {YP,WP,ZP} and whatever they dominate. The minimal domain is just {YP,WP,ZP}. The internal domain is {WP,ZP}, and the checking domain, thus, YP. Notice also that α_1 is in the checking domain of the one-member chain H.

V is inserted already inflected, but, crucially, the inflectional features do not become activated until checked in the appropriate functional projection. It becomes clear, thus, that whatever features the V has are relevant only when checked, and that this only happens through movement to a functional projection. Let me now make more explicit what I stated in the first paragraphs, namely that there are two conditions, φ-content and V-movement, that INFL should be satisfying, in order to qualify as "strong" or identificational:

Benedicto: AGR, ?-features and V-movement: Identifying <i>pro </i>
pro is (φ-)identified iff it is in the checking domain of an active φ-bearer.

Finally, arguments (which are, too, generated with their full inflection) must also move to get Case checked. Likewise, *pro* needs to move not only to get Case,³ but also to get its reference identified.

This paper is organized as follows. In section 1, I will discuss Russian and I will present evidence supporting my claim that there is lexical material independently generated under Agr_so whose purpose it is to identify the null empty subject *pro*. I will thus claim that, despite the surface data, Russian is a *pro-drop* language.

In section 2, I will reinterpret some data from Puerto Rican Spanish (henceforth, PR-Sp) to show how the movement of V interacts with its ϕ -content in the identification of pro.

1. Φ's Without Movement (or when no movement raises the φ's).

In this section, I will discuss the effects of the absence of verb movement on pro identification. For this purpose, I will use a language that allows for the isolation of the two factors under consideration, namely the effects of verb movement and the presence/absence of ϕ 's. Such a language is Russian.

After a brief presentation of the facts in Russian, I will first show that Russian lacks verb movement; next I will show that what appears to be a subject pronoun is actually the lexicalization of the ϕ 's generated in Agro. I will conclude that Russian is a *pro-drop* language with an overt Agro head, independent of V.

Russian shows a verbal agreement paradigm that could easily be argued to be 'rich' or 'strong' in that it presents the same contrasts as Spanish or Italian, two 'well-behaved' prodrop languages:

(8) rabotatj 'to work'

ja rabotaju 'I work'

ti rabotajesh 'You work'

on,ona rabotajet 'he, she works'

mi rabotajem 'we work'

vi rabotajete 'you (pl) work'

onji rabotajut 'they work'

However, Russian has overt non-emphatic pronominal subjects:

(9) ona čitajet knigu she read-3sg book-ACC 'She reads a book'

Crucially the presence of the subject pronoun in (9) is not contrastive, as opposed to what happens in the prototypical *pro-drop* languages (where the presence of an overt subject pronoun is systematically contrastive or non-neutral). In sum, the absence of a thematic pronominal subject is ungrammatical:

³Because of Visibility or some related principle.

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University of Massachusetts Occasional Papers in Linguistics, Vol. 20 [1994], Art. 2

(10) *rabotajet⁴ work-3sg 'she/he works'

On the other hand, Russian allows null expletives:

(11) a. kažetsja, shto tjeplo seems:3sg-REFL that warm:Ncut. 'It seems to be warm'

> b. večerejet get.dark:3sg 'Evening is drawing in'

Following Rizzi (1986), I will assume that the problem is one of identification and not one of licensing.

A closer look at the verbal morphology shows that the verbal paradigm is not uniform. Contrary to the Non-Past⁵ paradigm of (8), the Past paradigm only exhibits contrasts for Number and (partially) Gender:

ja, t+, on rabotal 'I, you work; he works' [masc. sg.]

ja, t+, ona rabotala 'I, you work; she works' [fem.sg.]

m+, v+, onji rabotali 'we, you(pl), they work' [plural]

The paradigm in (12) could be considered 'poor' or 'non-strong' and that could, possibly, explain (part of) the problem. However, if this were the whole story, we would expect the Past to be non *pro-drop* but the Non-Past to be *pro-drop*, which is contrary to fact.

Our initial hypothesis is that two conditions are needed for the identification of pro: (i) adequate ϕ -content, and (ii) an adequate structural configuration. Given that the potential ϕ -content is ambiguous, let us consider other properties of Russian and see whether the structural configuration can shed some light on the problem. Specifically, let us consider the movement properties of the verb and see whether they provide the relevant configuration stated in (7). The rationale is the following: if V does not raise to Agro (the functional head that activates the verb's ϕ 's), its ϕ 's will not be activated for identification, and thus, identification by these ϕ 's will fail. The type of data to be considered include: (i) relative positioning of adverbs and (i) Quantifier Floating.

Verb movement usually results in a manner adverb intervening between the verb and the object (V-adv-O), whereas absence of verb movement correlates with two characteristic patterns: manner adverbs precede the verb (m.adv.-V) and manner adverbs are prevented from intervening between the adverb and the object. Spanish and English, respectively, can be representatives of those patterns:

⁴Russian may show restricted argumental ellipsis. This is strictly context or discourse dependent. As mentioned in the text, the crucial difference is that the presence of a lexical pronoun is not contrastive.

⁵'Non-Past' stands for Present with Imperfective verbs, and for Future with Perfective verbs.

⁶There is also a potential neutral form in -lo for the singular.

⁷This is actually the case in Hebrew: it is *pro-drop* in the Past, where the affix is 'contentful', but not *pro-drop* in the Present, where, like Russian in the Past, the verbal forms only show nominal agreement..

- (13) V-movement Benedicto: AGR, ?-features and V-movement: Identifying <1>pro</i>
- a. La bomba hirió [mortalmente] a dos personas.
 the bomb wounded mortally P two people
- b. *The bomb wounded [mortally] 2 people
- a'. ?*La bomba [mortalmente] hirió a 2 personas.
 the bomb mortally wounded P two people
- b'. The bomb [mortally] wounded 2 people

With respect to placement of Adverbs, Russian behaves like English rather than Spanish:

- (14) a. Anna [bistro] chitajet retsepti
 A.:NOM quickly read:3sgPres recipes:ACC
 'Anna quickly reads the recipes'
 - b.*? Anna chitajet [b+stro] retsepti
 A.:NOM read:3sgPres quickly recipes: ACC
 'Anna quickly reads the recipes'

The neutral, flat intonation unmarked order for an assertion is the one in (14)a. With the same flat intonation, (14)b., an adverb intervening between the verb and the object yields an ungrammatical result.⁸

Floating quantifiers (FQ) have also been used as a diagnostic for verb movement, under the assumption that the FQ can be associated with some Specifier position related to the subject and left behind when both the subject and the verb move. So, the following contrast arises, again between Spanish, (15)a., and English, (15)b., (as two prototypical languages with and without V movement, respectively):

(15) V movement

No V movement

- a. Los estudiantes leyeron [todos] Guerra y Paz the students read all W&P
- b. *The students read [all] War and Peace
- a'.Los estudiantes [todos] leyeron G.& P.
- b'. √The students [all] read W & P.

Again, Russian patterns with no-movement type languages rather than with movement languages:9

- (16) a. Studjent‡ [vce] chitajut Bojnu i Mir. students:NOM all:NOM read:3pl W&P:ACC 'The students all read War and Peace'
 - b. * Studjenti chitajut [vce] Bojnu i Mir. students:NOM read:3pl all:NOM W&P:ACC

⁸It is important to keep the intonation constant, because changes in intonation can alter the result of the tests. Postverbal adverbs improve considerably if given contrastive stress; I will not pursue this issue here. Much more research is needed in the interaction of intonation and structural configuration.

⁹ It is important, as with the adverb examples, to keep intonation constant and to make sure that the object is not right dislocated, to obtain the right results. Otherwise cases like (16)b. or (14)b. considerably improve when the object is made 'heavy' and the FQ (or the adverb) takes contrastive intonation; but then of course, the structural conditions have changed.

The main conclusion of Messachusetts Occasional Papers in Isinguistics, (95) and (14), that the one hand, and between (15) and (16), on the other hand, is that V in Russian does not raise to Agrso.

I will now turn to consider data bearing on the (independent) lexicalization of Agro. Russian shows some asymmetries involving the positioning of subject pronouns and NP subjects in questions. In a non-contrastive interpretation of the subject, a subject pronoun must appear preverbally, whereas an NP subject must appear postverbally:

- (17) a. gdje [t+] rabotajesh? where you-sg work-2sg 'where do you work?'
 - a'. *gdje rabotajesh [t+] ? where work-3sg you-sg 'Where do you work'

- b. gdje rabotajet [tvoj papa] ?
 where work-3sg your dad
 'Where does you father work'
- b'. * gdje [tvoj papa] rabotajet ? where your dad work-3sg 'Where does you father work'

However, if the subject is contrastive, the situation reverses, and the NP appears preverbally, whereas the pronoun appears postverbally:

- (18) a. gdje TVOJ PAPA rabotajet ? where your dad work-3sg 'Where does YOU FATHER work'
 - b. gdje rabotajesh T+?
 where work-3sg you-sg
 'Where does you father work'

I will focus, first, on the contrasts in (17). To explain why pronouns but not NPs can appear preverbally in questions, I will exploit the hypothesis that the subject pronoun is actually a head that lexicalizes a set of ϕ 's. If this is so, then, in a configuration like (17)a., no coordination of $t \neq 0$ with a full NP will be possible, as is the case:

(19) * gdje [t+ i tvoj bratj] rabotajete?

where you-sg and your brother work-2pl
'where do you and your brother work?'

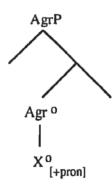
However, coordination of the pronoun with another head pronoun should be fine:

(20) što [on i ona] čitajut ?¹⁰
what he and she read-3pl
'What do he and she read?'

The actual proposal is that these pronominal heads are base generated under Agro, as in (21):

¹⁰Notice that the agreement of the verb is plural, although each of the two pronouns is singular. However, if the pronominal subjects are postverbal, then the agreement is in the singular: 5to čitajet[sg] [on i ona]? Pressumably in this case, the coordinated items are NP versions of the pronoun, and the verb only agrees with the first element of the coordination.

(21)

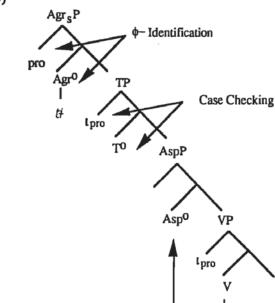


Notice that this analysis is not intrinsecally different, as far as the pronominal is concerned, from a subject clitic (scl), under the analysis that scl are base generated (cf. Borer (1983) and Roberge (1986)) in Agr. The main differences between languages with scl and languages with pronominal agreement heads is that in the former but not in the latter there is $V \rightarrow Agr_s$, at least before Spell Out. That there is actually no (obligatory) $V \rightarrow Agr_s$ in Russian can be shown by the fact that adverbs may intervene between the (pronominal non-contrastive) subject and the verb:

(22) što ti vcegda čitajesh? what you always read-2sg 'What do you always read?

Thus, the sentence structure that I am proposing is as in (23):

(23)



Pro raises to Spec, TP to get its Case checked, and to Spec, AgrP, where it enters a Spec, Head relation with an active φ-bearer, namely the pronominal head. This configuration satisfies condition (7) for identification of pro, so pro is successfully identified.

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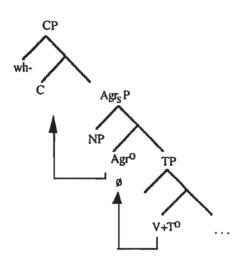
However, by saying that the pronominal subject in (17) is an agreement head, I have not explained the contrast between pronouns and non-pronominal NP subjects in (17)a. and b., repeated here:

(17) a. gdje [t+] rabotajesh?
where you-sg work-2sg
'where do you work?'

b. gdje rabotajet [tvoj papa] ? where work-3sg your dad 'Where does you father work'

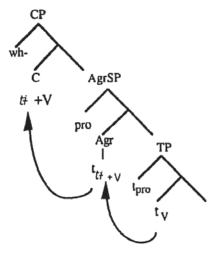
Movement of V to C^o when a non-pronominal subject NP is occupying Spec,AgrP yields (17)b.:

(24)



When a pronominal head occupies Agro, V moves to Agro and to Co, taking the Agrhead with it. This yields (17)a.:

(25)



This is also the case for examples like (26):

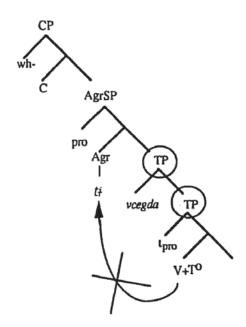
• (26) što tł čitajesh vcegodie dicto: AGR, ?-features and V-movement: Identifying <i>pro</i>what you read-2sg always 'What do you always read?

where *vcegda* is interpreted contrastively. Consider again however, cases like (22), in which the adverb intervenes between the pronominal Agr and the verb, repeated here:

(22) što tł vcegda čitajesh? what you always read-2sg 'What do you always read?

I am assuming that adverbs may be adjoined to either TP or VP, depending on their scope and interpretation; ¹¹ for this specific case, I will assume that *vcegda* is adjoined to TP. If V moves through To, across the adjoined structure, to Agro and Co, the trace of V in To will not be properly governed, because the adjoined TP creates a barrier:

(27)



This analysis also accounts for (18)a., repeated here:

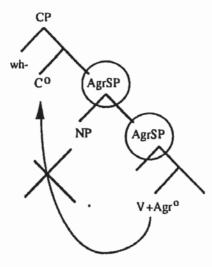
(18) a. gdje TVOJ PAPA rabotajet ?
where your dad work-3sg
'Where does YOU FATHER work'

Consider the interpretation of TVOJ PAPA. The way it is contrastive is by reestablishing the topic of the sentence (not necessarily of the discourse); it does not need to be new information, it can be information that has already come up in the discourse and that is brought again to the general attention. It establishes the new "aboutness" of the sentence. For these reasons, I will call it Topic Resetting. In order to capture this interpretation, I will adopt Benedicto's (1993)b. analysis that those NPs are actually adjoined to the maximal projection AgrP.

¹¹Crucially, the relevant reading for the adverbs in (14) is manner adverbs, that is, VP adjoined.

In such a configuration, what prevents Occasional Papers in Vinguistics, Vol 20 through At 210, the same situation is created as in (27), namely, the adjoined AgrP acts as a barrier preventing the proper government of the trace of V in AgrP. The derivation, thus, would crash:

(28)



Summarizing, I have provided an analysis for the Russian contrasts in (17) that, basically, proposes that Agr_{S^0} can be occupied by a (pronominal) head, which is the lexicalization of a set of ϕ -features (including Person). Under this approach, Russian is a *pro-drop* language, that satisfies condition (7) on the identification of *pro*, by means of the (active) ϕ 's in Agr_{S^0} .

This analysis provides an explanation for the contrasts in (17) between non-pronominal NP subjects and subject pronouns in questions in Russian. An analysis that treats subject pronouns as NPs in Spec, AgrP (just as regular non-pronominal NPs) predicts that (17)a'. should be grammatical, which is not:

(17) a'. *gdje rabotajesh [ti] ? where work-3sg you-sg 'Where do you work'

However, this is not to say that subject pronouns in Russian are always Agr⁰. They can also project a whole NP (or DP) and occupy an argumental position; in this case, Russian shows the same generalization that other *pro-drop* languages show: overt lexical pronouns for emphatic or contrastive instances; empty pronominal (*pro*) otherwise. This is the contrast in (18)b. vs. (17)a.¹²

2. V-movement and Identificational o's

In this section I will reevaluate some data from Puerto Rican Spanish (PR-Sp) involving non-emphatic subject pronouns, and I will show that their distribution is tied to the identification of *pro* and to the movement behaviour of the verb.

As opposed to Standard Spanish, which has only emphatic or non-neutral instances of subject pronouns, PR-Sp shows non-emphatic subject pronouns. This fact was noticed by

¹²Recall that for cases like (17)a. I have proposed that the argumental subject is *pro* in spec, AgrP.

Benedicto: AGR, ?-features and V-movement: Identifying <i>pro</i> descriptive grammars such as Davis (1971), Lipski (1977), Quirk (1972), Navarro Tomás (1948) for different varieties of Caribbean Spanish. (29) is an example:

(29)Qué tú quieres? [PR-Sp] what you-sg want-2sg 'What do you want?'

Contreras (1989), briefly mentioning the case of (29), proposes a clitic analysis for the pronoun, and gives the following structure:

(30)
$$\left[\begin{array}{c} \text{CP Qu\'e_i} & \left[\begin{array}{c} \text{VP [V t\'uj-quieres t_i] e_j} \end{array} \right] \\ \text{what} & \text{you want-2sg} \end{array} \right]$$

where the clitic, generated with the verb, 'is licensed at S-structure by being coindexed with an empty category in argument position' (p.175) [Notice that he base generates the subject VP-internally to the right of V'].

Heap (1991) slightly modifies Contreras' analysis and proposes the following:

[31)
$$[_{CP} \text{ Qu\'e}_i \ [_{IP} \ [_{I'} \ \text{t\'u}_j - \ [_{VP} \ [_{V'} \ \text{quieres } t_i \] \ e_j \]]$$
 (modified from his (9)b) what you want-2sg

where the clitic is generated as the head of IP, still c-commanding the VP-internal (empty)

A clitic analysis for (29) seems right .13 However, there are two problems for which hese previous analyses do not provide an explanation. The problems are the following:

32) a. Why do subject clitics only appear in Ouestions? b. Why only some Person(s) and not others? (e.g., 2sg vs 3sg)

The data relevant for these two questions appears in (33):14

- 33) a. Tienes una carta en la mesa have:2sg a letter in the table 'You have a letter in the table'
 - b. qué *(tú) quieres? what you:sg want:2sg 'What do you want?'

- c. Tiene una carta en la mesa. have:3sg a letter in the table 'He has a letter in the table'
- d. Qué (*él) quiere? what he want:3sg 'What does he/she want?'

Note that subject clitics (scl) show up in questions ((33)b. as oppposed to (33)a.), and with 2sg as opposed to 3sg ((33)b. vs. (33)d.). ¹⁵ Consider the structures corresponding to 33) more carefully.

Assuming that the verb raises in PR-Sp as it does in Standard Spanish, it moves hrough To where it checks its Tense features and activates its Nominative features to be hecked against by the material in the Spec; then, V+T raises to Agro where it checks its

¹³For some more syntactic arguments in favour of the clitic-hypothesis, cf. Benedicto (1993)a.

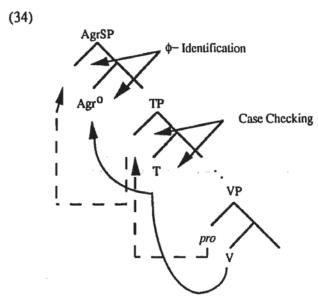
¹⁴PR-Sp speakers master, at least, two registers of the language, one that can be considered standard, sed in mass media, formal speech, etc, and a second one, used in informal conversation, among friends and amily, etc. I will be referring to the latter all along this paper. This cautionary note is necessary because ome of the judgements given a * could be acceptable in the standard register, which is not the focus of this ork.

¹⁵ There is a great deal of variation across dialects of Caribbean Spanish with respect to which 'erson(s) show scl. Cf. the Appendix of Benedicto (1993)b. for a generalization.

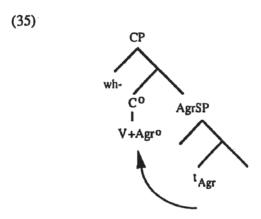
University of Massachusetts Occasional Papers in Linguistics, Vol. 20 [1994], Art. 2 agreement features, which become active for identification of material in the Spec (cf. (34)).

Pro, on the other hand, needs to raise, as any other lexically overt NP subject, in order to get Case, thereby becoming an appropriate LF-object. So, it raises to Spec, TP where it gets Case-checked. However, pro still needs to satisfy one more requirement before becoming an appropriate LF-object, and that is identification. That identification, I claim, is accomplished by further raising of pro to Spec, AgrP, where it stands in a Spec, Head relation with the activated (and, thus, identificational) φ-features of V+T in Agr⁰.

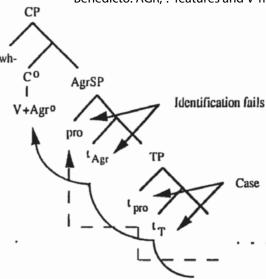
The derivation is depicted in (34):



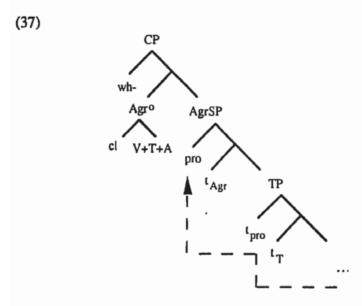
(34) is the structure corresponding to (33)a. and c. Let's now consider (33)b. and d. In questions, a wh- word appears in Spec, CP, and V(+T+A) raises to Co (giving rise to the well-known verb-subject inversion effects):



A trace is now occupying Agr⁰. When *pro* raises to Spec,AgrP to be identified (via Spec,Head relation), the head that it finds is a trace, and identification fails, pressumably because traces do not retain information about the ϕ -content of their antecedents. The situation is depicted in (36):



However, the configuration in (36) yields different results for (33)b.[2sg] and d.[3sg]: (33)d. is grammatical, while (33)b. is ungrammatical. For (33)b. to be grammatical, the presence of a scl is required. ¹⁶ Following my initial hypothesis, I will assume that the scl is generated under Agr_s⁰, and V raises and (right-)adjoins to it; the complex Agr_s⁰ (scl+V), then, raises to Co: ¹⁷



¹⁶The situation where a scl in Co is required for the interpretation of a subject *pro* is not unique. Similar facts (basically, (i) [CP[C·C+*(cl) [IPpro...] vs. (ii) [CP[C·C+(*cl) [IP NP...]) have been described for WFlemish (Haegeman (1992), ch.2), some dialects of German (Bayer (1984)) and Arabic (Borer (p.c.)). It is not clear, however, whether we are dealing with the same phenomenon.

¹⁷Much in the same way as it has to happen with object clitics, if we want to maintain the clitic-in-Agr hypothesis: right-adjunction of V to Agr_o^o and further movement of the complex ocl-V to T^o and Agr_s^o.

Given that the structural relation between the intended identifier (the V in C) and its identifiee (pro in Spec, AgrP) is the same in both cases, I will entertain the hypothesis that the \$\phi\$-content of V is responsible for the asymmetry in (33)b./d.

The presence of the scl in PR-Sp has been explained 18 in terms of the syncretism that occurs between 2sg and 3sg, as a result of loss of the final -s in 2sg (tiene[s], quiere[s]) without further compensatory lengthening. If this syncretism is understood as the loss of ϕ -content in 2sg, a behaviour like the one in (33)a. and b. would not be expected, since 2sg does indeed show effects of ϕ -content (namely, in declarative contexts as (33)a., where the subject pro is being identified).

It cannot be the case that 2sg has total loss of ϕ -content. Suppose we formulate a more accurate characterization of units with ϕ -content:

(38) (a) a ϕ -bearer α is weak iff

its \(\phi\)-features (i) only identify in a restricted checking domain (via Spec-Head Agreement), and

(ii) only stay active in situ.

(b) a ϕ -bearer α is strong iff

its \u03c4-features (i) identify in a non-restricted checking domain, and

(ii) remain active once activated.

(38)(a) recognizes the presence of ϕ -content in a given item, while restricting its range of action: weak ϕ 's, activated in Agr^o, can only identify in that position, via Spec,Head; once they leave the structural position where they are activated (as when V moves to C^o), they are no longer "active" or identificational: this is the case of 2sg.

The strong elements of (38)(b), on the other hand, correspond to sets of ϕ 's that keep their properties once activated independently of their final structural position. Such is the

case of 3sg or of scl's.

A technical detail: the condition on identification (7) proposed earlier and repeated below.

(39) Identification of pro

pro is (φ-)identified iff it is in the checking domain of an active φ-bearer.

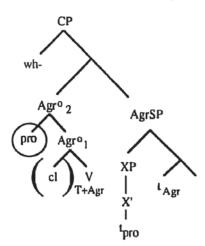
establishes that the configuration where identification has to take place is the *checking* domain of the identifier.

However, both in (36) and (37) the pro in Spec,AgrP is not in the checking domain of the identifier head (Agr^o in C^o). For the head-chain (V+Agr, t_{V+Agr}) in C^o (the intended identifier), the checking domain is, according to the definitions in (1)-(5), just the Spec,CP (\approx YP in (6)); Spec,AgrP,where pro is located, is part of the internal domain (\approx WP in (6)) of the chain under consideration.

The solution I propose here utilizes the same notion of head movement that is responsible for the movement of V to the functional projections: a head raises to check its features. Pro, as other pronouns in argumental position, has the property of being at the same time a maximal projection and a head; as a maximal projection, it has already satisfied one of its requirements, Case (Case is a property of maximal projections), in Spec, TP. The ϕ -features that it has to check for identification, however, are a property of the head itself. So, the head pro raises to check its ϕ -features and head-adjoins to the identifying head, Agro in Co:

¹⁸Cf. Benedicto (1993)a.

(40)



In this configuration, pro is in the checking domain of its identifier (the chain headed by Agr^o1): it is contained in Max(CH); it is distinct from and does not contain any part of the chain; finally, it is not its complement. Therefore it is in MIN(residue of CH), that is, the checking domain. It corresponds to α_1 with respect to H in (6).

The reason why we do not find other N^0 heads undergoing head-movement to an inflectional head is that it only occurs as a result of a 'checking' need; lexical heads have their own ϕ 's and, hence, do not need to identify them. As I already mentioned, the other instance of such movement is V-raising, and it takes place for the same (checking) reasons.¹⁹

The analysis just presented relies heavily on the data in (33). It would be good, then, to have some independent evidence for (38) and (39) or (40). (38)(a) establishes that a weak φ-bearer will only identify via Spec, Head relation from Agro, which means that its identifiee has to occupy the Spec of AgrP. Now, let's imagine that the Spec, AgrP is occupied by some other phrase; this is possible because Spec, AgrP is not the locus for (Nominative) Case checking, Spec, TP is. If there is material occupying Spec, AgrP, our approach predicts that identification by a weak φ-bearer is not going to be possible, and a scl will be needed. That is exactly what happens:

(41) Siempre tú la ves always you:2sg her see 'You always see her'

Siempre in (41) occupies Spec,AgrP²⁰, which prevents pro from raising to that position and being identified via Spec,H by the weak 2sg verbal ϕ -bearer. So, again, like in (37), an scl, a strong ϕ -bearer, is needed. This time, however, the head pro adjoins to the head of AgrP, yielding the same configuration (in the relevant aspects) as in (40).

¹⁹Head-movement to an inflected head is different from head-movement to a lexical head. The former, as I said, is only for purposes of "checking"; the latter has the effect of forming complex predicates, it prevents the incorporating X° from being referential and argumental at the relevant level of LF.

²⁰ As opposed to vcegda 'always' in Russian, siempre may cause VS inversion when S is a full NP:

 ⁽i) Siempre llama tu hermano en sábado always call:3sg your brother in Saturday 'Your brother always call on Saturday'

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Finally, I would like to address a related issue. The scl-hypothesis predicts that no full NP can intervene in a question between the wh- word and the verb. This is true under a neutral non-contrastive interpretation as in (42):

(42) *Qué tu mamá quiere? what your mom want:3sg 'What does your mom want?'

Instead, what we get is (43):

(43) Qué quiere tu mamá? what want:3sg your mom 'What does your mom want?'

However, these cases are grammatical when the preverbal subject acquires contrastive interpretation:

(44) Qué TU MAMá quiere? what your mom want:3sg 'What does YOUR MOM want?'

This situation is a perfect parallel of the situation in Russian: the (preverbal) subject pronoun contrasts with the (postverbal) full NP subject in questions ((17)a. vs. (17)b.), on the one hand, and on the other hand, the full (postverbal, non-contrastive) NP subject contrasts with the full (preverbal, contrastive) NP subject ((17)b. vs. (18)a.).

Moreover, the interpretation of these preverbal contrastive NPs in the Russian (18)a. and in the PR-Sp. (44) is very much the same. Thus, I will adopt the same analysis I proposed for the Russian cases (cf. (28)), namely, that TU MAMA in (44) is an NP adjoined to AgrP, which prevents movement of V to C^o by creating a barrier.²¹

Another instance of preverbal NP in questions is represented by cases like (45), where a negative quantifier appears preverbally:

(45) Qué nadie quiso? what nobody wanted:3sg 'What didn't anybody want?'

The crucial difference between this case and (44) is that the negative quantifier *nadie* in (45) is not contrastive; rather, it has an interpretation like the NP subject in (43), so I cannot appeal to an adjunction analysis to AgrP (which is strictly tied to the interpretation of the NP). What is going on here? Consider the LF derivation of (45). *Nadie*, as a quantifier has to QR at LF; that would create the following structure:

(46) [cp qué Co [AgrP nadie; [AgrP ti quiso ...

which creates again the two segment category AgrP like in (18)a. or (44). As in those cases, if the V had moved to Co, its trace would violate the ECP because of the barrier created by QR:

(47) [cp qué quisoj [AgrP nadiei [AgrP tj tj...

²¹Actually, the adjunction configuration does not *per se* prevent the movement. Movement of V to C^o can take place, but then the derivation will crash because the trace of V in Agr^o will not be properly governed, violating the ECP.

In this way, a unified Beccediato: A GR befgature so the map year eatite identifying to pro-sob-hypothesis in PR-Sp.

3. Summary.

In this paper I explored a double hypothesis. First, that verbs are inserted fully inflected and have to raise to have their (identificational) features "activated"; in other words, there are two conditions, adequate φ-content and adequate structural configuration, that have to be satisfied for a verbal inflection to qualify as "strong" ('identificational'). This explains why languages with seemingly "strong" agreement morphemes do not show *pro-drop* characteristics: the lack of V-movement to the corresponding inflectional head keeps them inactive. This proposal was formulated in (7). Both in section 1 and in section 2, I showed the effects of the lack of an adequate structural configuration.

Secondly, I proposed that languages have the option of lexicalizing sets of ϕ -features under Agro. This amounts, basically, to generating head pronouns in Agro. This approach accounts both for independent (head) pronouns and for clitics; the main difference between them is not an intrinsec difference, but rather the result of (independent) movement of the verb; a lexicalized set of ϕ 's in Agro will yield a clitic whenever there is movement of the verb to that Agro, otherwise (when V does not move to Agro) it will yield an (independent) head pronoun.

References

- Auger, J. (1993), "On the Nature of Subject Clitics in Picard", paper presented at LSRL 23, DeKalb, Illinois.
- Bayer, L. (1984), "Comp in Bavarian Syntax", The Linguistic Review 3, pp.209-274.
- Benedicto, E. (1993)a., "Mixed *pro-drop* Systems: Subjects clitics and the (IP) Functional Projections", paper presented at LSRL 23, DeKalb, Illinois.
- Benedicto, E. (1993)b., "The (IP) Functional Projections and the identification of pro", ms. UMass.
- Borer, H. (1983), Parametric Syntax, Foris, Dordrecht.
- Borer, H. (1989), "Anaphoric AGR" in Jaeggli & Safir (eds), The Null Subject Parameter, Kluwer, Dordrecht.
- Brandi, L. and P.Cordin (1989), "Two Italian Dialects and the Null Subject Parameter" in Jaeggli & Safir (eds), *The Null Subject Parameter*, Kluwer, Dordrecht.
- Chomsky, N. (1989), "Some Notes on Economy of Derivation and Representation", MIT Working Papers in Linguistics, vol.10, p.43-74.
- Chomsky, N. (1992), "A Minimalist Program for Linguistic Theory", MITOPL 1, MITWPL
- Contreras, H. (1989), "Closed domains" in Probus 1.2, pp.163-180.
- Davis, J.C. (1971), "Tú, ¿qué tú tienes?" Hispania 54, pp.331-333.
- Heap, D. (1991), "La cliticisation des pronoms sujets dans l'espagnol de la République Dominicaine" in T. Wilson (ed) Actes du Congrès annuel de l'Association canadienne de linguistique.
- Jaeggli, O. & K.Safir (1989), "The Null Subject Parameter and Parametric Theory" in Jaeggli & Safir (eds), The Null Subject Parameter, Kluwer, Dordrecht.
- Lipski, J.M. (1977), "Preposed Subjects in Questions: Some Considerations", *Hispania* 60, pp. 61-67.
- Navarro Tomas, T. (1948), "El Español de Santo Domingo: contribución a la geografía lingüística hispanoamericana", Río Piedras, Editorial de la Universidad de Puerto Rico.

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Quirk, R.J. (1972), "On the Extent and Origin of Questions in the form ¿Qué tú tienes?", Hispania 55, pp.303-304.

Rizzi, L. (1982), Issues in Italian Syntax, Foris Publications, Dordrecht.

Rizzi, L. (1986), "On the Status of Subject Clitics in Romance" in O.Jaeggli & C.Silva-Corvalán (eds), Studies in Romance Linguistics, Foris, Dordrecht.

Roberge, Y. (1986), The Syntactic Recoverability of Null Arguments, Ph.D., University of British Columbia.

Rohrbacher, B. (1992), "English and Mainland Scandinavian Auxiliaries and the Theory of V to INFL Raising", to appear in LCJL, proceedings of CONSOLE 1. Rohrbacher, B. (1993), "V-to-I Raising in European and Brazilian Portuguese: Tales from

the Agreement Recession", Syntax Group Seminar presentation, UMass.

Safir, K. (1986), "Subject Clitics and the NOM-Drop Parameter" in H. Borer (ed), The Syntax of Pronominal Clitics, Syntax and Semantics vol.19, Academic Press.

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